



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND  
TECHNOLOGY

UNIVERSITY EXAMINATIONS 2012/2013

1<sup>ST</sup> YEAR 2<sup>ND</sup> SEMESTER EXAMINATIONS FOR THE DEGREE  
OF BACHELOR OF SCIENCE IN COMMUNITY HEALTH AND  
DEVELOPMENT

(BUSIA LEARNING CENTRE)

COURSE CODE: HDC 2125

COURSE TITLE: INTRODUCTION TO HUMAN ANATOMY AND  
PHYSIOLOGY

DATE: 19/04/2013

TIME: 9.00 AM – 10.30AM

DURATION: 1.5 HOURS

INSTRUCTIONS

1. This paper contains TWO sections.
2. Answer ALL questions in section A (Compulsory) and ANY other Two questions in section B.
3. Write all answers in the booklet provided.

**Section A: Answer ALL questions (30 marks)**

1. Name the three layers of the skin **(3 marks)**
2. List any three chambers of the heart **(3 marks)**
3. Draw and label the human bronchial tree and state one function of the alveoli **( 3 marks)**
4. Classify the nervous system and state three of its functions **(3 marks)**
5. Name any three major parts of the brain **(3 marks)**
6. Name the two long bones of the upper limb and the two long bones of the lower limb **(3 marks)**
7. State three functions of the liver **(3 marks)**
8. State the parts of the kidney (gross anatomy) and outline three functions of the kidney **(3 marks)**
9. State three factors that affect the basal metabolic rate **(3 marks)**
10. Name any three blood vessels **(3 marks)**

**Section B: Answer ANY TWO questions (Total 30 marks)**

1. Draw and label a cross section of the heart and explain how in detail how it functions **(15 marks)**
2. **(a)** State the function of the human ovary **(1 mark)**  
**(b)** List four hormones secreted by the corpus luteum stating the function of each hormone **(4 marks)**  
**(c)** Using a diagram describe the ovarian and menstrual cycles **(10 marks)**
3. **(a)** State four functions of the kidney **(4 marks)**  
**(b)** Name the functional unit of the kidney **(1 mark)**  
**(c)** Draw and label this functional unit **(4 marks)**  
**(d)** State the functions of the various parts you have just labeled indicating various hormones which influence the function of the various parts **(6 marks)**
4. Draw gross anatomy of the human digestive system and explain the entire process of digestion from the mouth up to absorption of nutrients and water. **(15 marks)**